

REMARKS

Claims 7-10, 12, 41, 42 and 44 are now pending in the application. Claims 1-6, 11, 13-40 and 43 have been cancelled, without prejudice. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102; McWILLIAMS

Claims 7-10, 12, 41, 42 and 44 stand rejected under 35 U.S.C. § 102(e) as being anticipated by McWilliams (U.S. Publication No. 2004/0233521). This rejection is respectfully traversed.

Independent Claim 7 recites, in part, a repeating "automatic routine including . . . (d) determining if said identified celestial object is introduced into a center of field in the captured image with a sufficient precision; (e) controlling a rotation of said astronomical telescope so that said celestial object is introduced into a center of field in the captured image if said identified celestial object is not introduced with the sufficient precision, and ending said automatic routine if said identified celestial object is introduced with the sufficient precision; (f) shifting the focal distance of said image-capturing means to a longer focal distance for a more telescopic side; and (g) capturing an image of said celestial object by said image-capturing means which is set at said longer focal distance, wherein the steps (b) to (g) of said automated routine are repeated, until said automated routine is ended in the step (e).

Similarly, Independent Claim 10 recites, in part, a repeating "automatic routine including . . . (d) determining if said target celestial object is introduced into the center

of field of the telescope with a sufficient precision; (e) shifting the focal distance of said image-capturing means to a longer focal distance for a more telescopic side if said target celestial object is not introduced with the sufficient precision, and ending said automatic routine if said target celestial object is introduced with the sufficient precision; and (f) capturing an image of said celestial object by said image-capturing means which is set at said longer focal distance, wherein the steps (b) to (f) of said automated routine are repeated, until said automated routine is ended in the step (e).

McWilliams does not disclose or suggest a repeating automatic routine for automatic introduction of a celestial object as recited in the quoted language of Claim 7 or Claim 10. Instead, McWilliams states in paragraph [0042]: "This process is preferably repeated for several bright stars until the measured angles between the bright stars provide a unique solution, from which the orientation may be determined." Further, McWilliams states in paragraph [0045]: "If the processor 24 does not find the unique solution, the telescope 10 repeats steps 4d-e."

Applicants understand that this rejection relies on a separate and independent autofocus feature to assert that McWilliams discloses capturing images at a longer focal length as part of the automatic repeating celestial object introduction routine. Applicants note that such an autofocus feature is not a component of any repeating automatic routine for introducing a celestial object, and certainly is not involved in the control of the automatic routine as recited in Claim 7 or Claim 10. Specifically, the autofocus feature of McWilliams does not shift the focal distance to a longer focal distance during each repetition of a repeating automatic routine, until the automatic repeating routine is ended

with the introduction of the celestial object with sufficient precision as recited in these claims.

Moreover, McWilliams would lead one skilled in the art away from modifying any disclosed repeating process to include an autofocus feature that operates by "shifting the focal distance . . . to a longer focal distance" during each repetition of the automatic repeating process (as is recited in Claim 7 or Claim 10). As noted above, the McWilliams process looks for a unique solution for measured angles between bright stars, and repeats the process if no unique solution is found. If, in repeating the process, a longer focal length were used as recited in Claim 7 or Claim 10, the field of view would be narrower during the repeated process. Since the process failed to find a unique solution in a broad field of view, it would not make sense to repeat the process using a narrower field of view than one which had already failed to provide a unique solution. If anything, a wider field of view would be used to increase the chances of finding a unique solution (after a narrower field of view had failed).

Not only does the asserted combination fail to disclose or suggest Applicants' inventions as recited in Claims 7 and 10, but Applicants respectfully assert that the suggested combination detailed in the rejection is itself improper. For example, the rejection improperly combines selected aspects from two separate and distinct routines disclosed in Fig. 4 and Fig. 5 of McWilliams to assert McWilliams discloses aspects of the repeating automatic routine of an automatic celestial object introduction apparatus as recited in Claim 7 or Claim 10. In actuality, the process shown in Fig. 5 of McWilliams is not an automatic repeating process at all. Further, the process of Fig. 4 is not an automatic celestial object introduction process, but is instead an initial

orientation identification process.. Accordingly, Applicant respectfully asserts there is no proper basis for selectively choosing and combining various aspects of the process of Fig 5 with various aspects of the separate and distinct process of Fig 4 as detailed in this rejection in an attempt to cobble together a single automatic repeating celestial object introduction process as recited in Claims 7 or 10, and the suggested combination detailed in this rejection is based on nothing more than improper hindsight.

For at least the reasons detailed above, Applicants respectfully assert that McWilliams does not disclose or suggest the repeating automatic celestial object introduction routine as recited in Claim 7 or Claim 10. This rejection provides no reason for picking and choosing certain specified aspects from separate and distinct processes of McWilliams as detailed in this rejection, and appears to be based upon improper hindsight. Moreover, even if the various selective aspects from the different routines of McWilliams were to be combined as detailed in the rejection, McWilliams does not disclose all of the features of Applicant's inventions as recited in Claims 7 and 10 (for at least the reasons discussed above). Since each of the remaining pending claims depends from one of independent Claims 7 or 10, directly or indirectly, Applicant respectfully asserts that they are likewise patentable for at least the reasons discussed above.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is

believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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